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## THE RATE OF PROFITS UNDER THE LAW OF LABOR-VALUE.

ECONOMIC discussion today seems to have reached a point where further abstract reasoning can prove but a practical demonstration of the incompetency of the abstract method in Political Economy. Men of the highest analytical powers and foremost in the ranks of scholars have failed to come to an understanding on fundamental problems of their science, such as Value, Profits, Interest. If we are to make headway at all, there is no resort but to invoke the evidence of fact. Statistics is storing up immense accumulations of economic facts, and we believe ere long the whole science will have to be reconstructed on the ground of statistical testimony. But before such testimony can be called in, the issue must be clearly joined and all irrelevant argument properly demurred to. To perform this duty in behalf of the Ricardian school is the object of the present paper.

Ricardo's doctrine has of late incurred the distrust of economists. The cause of this distrust we are inclined to attribute to the fact that the old master's last and unflinchingly consistent disciple, Karl Marx, was the founder of Scientific Socialism. In Germany, where the university is but an organ of the state, teachers of Political Economy have felt it incumbent on them to put a check upon the influence of Karl Marx, which has come to be a potent factor in public life. The analytical mind of the German scholar could not help seeing that Karl Marx's theory of capital was the logical consequence of his theory of value; the latter, however, was but the outgrowth of Ricardian principles. Successfully to cope with the problem before them, German students were thus brought to attack the very foundations of the Ricardian system. The Austrian school, which began the attack, presently won a leading place in German economic discussion, and the reputation of that school spread rapidly abroad.

It was the ill fate of Karl Marx that the criticism of his doctrine came only after his death. He had the satisfaction of seeing hundreds of thousands of worshipers gathered around his name, but he left no school to continue the scientific work cut short by his death. The teacher valiantly kept on the offensive to the last breath; his followers have shown complete inability to hold the defensive, until in England socialists themselves have abandoned Marx for Jevons, the forerunner of the Austrians.<sup>1</sup>

Two causes have been in operation which account for this decline of theoretical thinking among German socialists. First, in the astounding growth of the party, all the academic acumen of socialists has been devoted to the needs of socialistic propaganda and absorbed in the stultifying work of newspaper editing. Secondly, aside from this purely external cause, there is an internal and far more important agency incapacitating German socialists for scientific study, and that is the prevailing spirit of the party hostile to free investigation.

Karl Marx was a middle-class man, a true son of the nation of thinkers, and he wrote for those of his class who had leisure for thinking. His followers had before them a nation of workmen and soldiers who had neither the habit of theoretical speculation nor the leisure for such work. To drill these masses into Socialism, the indigestible doctrine of the teacher underwent a vulgarization. Faith in the catechism supported by the authority of the teacher necessarily took the place of original scientific research. The fearless spirit of criticism which will forever remain one of the great attractions of Karl Marx, has departed from his successors. Marxism has evolved into a theocracy, to which the very idea of questioning the dogmas of the synagogue is foreign.

Dr. Adler in his study of Marx quotes from Mr. Kautsky, the official theorist of the party, the very naïve assertion that after book iii. of *Capital* shall have been published, "Political Economy will have either to follow in the lines laid down for it by Marx, or to hand in its resignation, as a Science, declaring

<sup>1</sup> *Socialism in England*, by SIDNEY WEBB, pp. 84-85.

that it is nothing but the safeguard of Profits and Rent."<sup>1</sup> The ingenuousness of the prophecy, says Dr. Adler, is emphasized by Mr. Kautsky's admission that he has no knowledge of the contents of book iii. We might also refer to the celebrated controversy on State Socialism between von Vollmar and the party, when Mr. Kautsky, in his magazine,<sup>2</sup> called for an "authentic definition of State Socialism by the convention of the party."

A party enacting scientific definitions by a majority vote is manifestly unfit to participate in a scientific contest. This ought not, however, to reflect upon the Ricardo-Marxian theory of value, which might find support beyond party lines. The writer of this paper, believing that the theory can be maintained without "quotations from authorities, or protesting and dogmatizing phrases," ventures to take up Professor Böhm-Bawerk's challenge.<sup>3</sup> Whether the "proof" that is here "supplied" can be taken seriously, the writer leaves others to judge.

# 1.

"The law of labor-value," to use Professor Böhm-Bawerk's term, as enunciated by Ricardo and further developed by the analysis of Karl Marx, may be briefly summed up as follows:

In a state of free competition where supply can always conform to demand, supply and demand mutually balance each other; utility exercises no influence upon the terms of exchange; and the exchange value of commodities, provided they have been produced in compliance with the prevailing technical methods, is measured solely by the quantity of human labor embodied in them. The special utility of the commodity is a prerequisite of exchange; it is the object of exchange to put the purchasers in a position to enjoy the special utilities of all the goods produced under our system of division of labor.

Among the commodities so exchanged is one possessing pecu-

<sup>1</sup> *Die Grundlagen der Karl Marx'schen Kritik der bestehenden Volkswirtschaft*, by Dr. GEORG ADLER. Tübingen, 1887, p. vii.

<sup>2</sup> *Die Neue Zeit*, vol. xi. (1892-93), p. 208.

<sup>3</sup> *Capital and Interest*, p. 389.

liar qualities, that one is Labor-Power. Its exchange value, like that of any other commodity, is measured by the quantity of labor expended in its production. The production of human labor-power, like that of horse-power, is practically reducible to the labor of supplying food, shelter, education, etc. The equivalent thereof being paid to the vendor of human labor-power, *i. e.*, to the workingman himself, the utility of his commodity passes by title of exchange to the purchaser, as in any other transaction of exchange. But the utility of labor-power manifests itself in the process of labor, and the result is a new commodity whose exchange value may not be, and as a matter of fact is not, equivalent to the exchange value of the labor-power by which it has been produced. The exchange value of the labor-power, which is the same as that of the subsistence of the laborer, may be measured by six hours of work a day; that is to say, six hours of work would produce all that is consumed by the laborer in a day, whereas by the terms of exchange he may have sold a day's work of eight hours. The balance of two hours is surplus-labor, and the value of the product of surplus-labor is surplus-value, which in the process of circulation of capital resolves itself into profits, interest, rent, taxes, etc.

The correctness of the whole argument is contingent on the correctness of the fundamental proposition, *viz.*, that under free competition the measure of exchange value is labor and that utility does not influence the ratio of exchange. This has never been proved by either Ricardo or Marx. Both have asserted it axiomatically. Neither, however, has the opposite proposition been demonstrated by their critics of the Austrian school, otherwise than by a mere axiomatic assertion.

Is value measured by labor or by utility? is a question of fact that can be conclusively solved only by systematic observation of facts, not by speculation. Still it must be admitted that even in physical sciences not all the propositions can be directly proven. The proofs of many hypotheses lie in this, that observation substantiates the correctness of conclusions based upon them. Even in Geometry, most exact of all sciences, the so called XI.

Axiom of Euclid is but a postulate proved true only by the correctness of subsequent propositions based thereon. Until some future economist shall prove the Ricardian postulate, as the XI. Axiom of Euclid was proved by Legendre, one is not justified in throwing the whole system to the winds without having tested its basic proposition by its logical results.

The objections that have been urged against the law of labor-value are many. Professor Böhm-Bawerk must be given credit for having compiled the most complete list of all objections that ever have been or ever can be urged against the law in question. Most of these objections have been answered in anticipation in Karl Marx's *Capital*. It does not come within the scope of this paper to go into an examination of them all, though the writer may return to them later. There is, however, in the theory one seeming contradiction which Karl Marx proposed to explain in book iii; but death prevented the completion of his work.

The two books published seem to us, however, to contain all the premises for a logical solution of the contradiction in question.

Let us first state the problem. If labor expended is the sole measure of value, if furthermore surplus-value is the product of surplus-labor, then the greater the portion of the capital which goes to buy labor-power, the greater also is the surplus-value produced; if this be true, then of two equal capitals that one will yield the greater surplus-value in which a greater portion goes to pay wages of labor-power (in Marx's terminology, "Variable Capital"), and a smaller portion is invested in fixed capital and raw materials ("Constant Capital"). This, it is claimed, stands in rank contradiction to "the law of assimilation of profits," according to which "the amount of surplus-value obtained stands, over the whole field, in direct proportion to the amount of the total capital—variable and constant together—that has been expended."<sup>1</sup>

## II.

Passing over, for the time, the false assumption of the identity of surplus-value with profits, and conceding for the sake of

<sup>1</sup> *Capital and Interest*, by E. VON BÖHM-BAWERK, English translation, p. 390.

argument that profits constitute a fixed portion of surplus-value, the question becomes, Is there in reality anything corresponding to the pretended "law of assimilation of profits"? Has the existence of such a law ever been proved? Is not rather an opposite tendency of profits toward inequality characteristic of a developed industrial community? A glance at the balance sheets of various stock companies, or a cursory examination of the reports of some of the American Bureaus of Labor Statistics which have made a special study of the subject, show, instead of the presumed uniformity, an immense variety of profit rates.

This law of assimilation of profits, as enunciated by classical Political Economy, was founded on the assumption of perfect mobility of capital. Capital, it was maintained, would flow freely into that branch of industry which for the time yielded greatest profits, until the increased competition caused by the influx of capital pressed down the rate of profits so low that a backward movement of capital out of this branch necessarily followed; after a few of these pendulum-like oscillations equilibrium would be restored.

Bagehot shows that this conception of unlimited mobility of capital was suggested to Ricardo by experience on the stock exchange; the celebrated banker and economist of our days amended the law of his predecessor by restricting it to stock exchange operations. Where capital is invested in expensive machinery, buildings, etc., it will stay in the business notwithstanding a low rate of profits.

We need only carry Bagehot's analysis one step further to see where and how the psychological tendency of the capitalist to secure as high a rate as his competitors is realized in economic life. Directly in proportion as stock companies and corporations become the typical form of capitalistic industrial organization are the operations of the stock exchange gradually extending over the whole field of industry. Whenever the profits of a certain corporation run ahead of the average, the selling price of the shares of stock goes up; when the profits fall short of the average, stock declines. By this process profits in stock corporations are

maintained at a pretty constant and uniform ratio to actual selling price of stock, not, however, to the invested value of the capital. The process is thus not one of assimilation of profits on capital, but, on the contrary, one of incessant adjustment of the selling price of stock to the capitalized value of the dividends it yields. What is done with shares of stock companies day in and day out is but an incident in the case of individual firms. The actual value of a private concern always varies from the capital nominally invested; the real value is ascertained by the owner when the business is put on sale. What the amount of capital originally invested was, concerns only the first investor, who appropriates the gain or stands the loss resulting from the present value. Subsequent owners acquire the business at the market price, which is nothing but its capitalized profit value, and will therefore realize an average profit until a new change in the business or in the average rate of profit ensue.

The question then arises, What induces the original investor to place his money in an enterprise requiring a large outlay in fixed capital if by these labor-saving improvements the rate of profit is to decrease and the capital invested depreciate accordingly? The answer is, that no business is ever started in the expectation of deriving average profits; expectation of extraordinary profits is what leads to the investment of money in new enterprises. An expensive plant which reduces the labor force by one-half is set up in one mill. Were the same plant introduced into all mills at once competition might compel owners to give away the full benefit to the consumers. Inasmuch, however, as the new improvement is generally introduced by only a few concerns, whereas the demand in the market calls for supply from most of the other factories, the market price of the article does not come down in proportion as cost of production has been reduced under the improved method. The owner of the improved plant then produces at a premium which essentially partakes of the character of rent. When the improvement becomes general competition drives prices down, profits fall short of the average in other businesses, capital depreciates; but



the accumulated rent of monopoly has already more than repaid the speculator the capital invested. The present selling price of his stock, though reduced to the capitalized amount of his actual profits, is to him a net gain.

The solution of the seeming contradiction involved in the law of labor-value can thus be formulated in the following proposition: The rate of profits being a fraction, of which the numerator represents the amount of profits and the denominator the value of the stock, the fraction remains invariable so long as the denominator varies in direct ratio to the numerator.

### III.

It goes without saying that even after having derived the full benefit of the monopoly the capitalist would not acquiesce in the depreciation of his stock, but would seek rather to keep his profits from sinking below the average rate. Could his efforts eventually meet with success if the law of labor-value prevailed? Or, to put the problem in exact terms: *Supposing value to be measured by labor, under what conditions can equal profits issue from two equal capitals employing unequal quantities of labor?*

The problem is clearly an arithmetical one and must be solved in arithmetical terms. No knowledge of mathematics higher than equations of the first power is required to follow the analysis.

I. The total capital invested (call it  $C$ ) is made up as follows:

- 1) Fixed capital, machinery, buildings, etc. ( $F$ );
- 2) Rentable property, land, mines, etc. ( $R$ );
- 3) Raw materials in store and in process of manufacture ( $M$ );
- 4) Finished product on hand ( $P$ );
- 5) Cash reserve on hand, bank deposits, bills and accounts receivable, etc. ( $B$ ).

Thus we have:

$$C = F + R + M + P + B. \quad (1)$$

The yearly product of this capital,  $Y$ , resolves itself into the following elements:

- 1) Raw material wrought over ( $M'$ );
- 2) Wear and tear of fixed capital ( $f$ );

- 3) Wages and salaries, "variable capital" in Marx's terminology ( $w$ );
- 4) Interest on the cash and credit capital employed ( $i$ );
- 5) Rent and taxes ( $r$ );
- 6) Commissions, selling expenses, etc. ( $e$ );
- 7) Net profit ( $p$ ).

Accordingly,

$$Y = M' + f + w + i + e + r + p. \quad (2)$$

The surplus-value of Marx ( $s$ ) is the aggregate of interest, rent, taxes, commissions and profits. Thus:

$$s = i + e + r + p. \quad (3)$$

His rate of surplus-value ( $\sigma$ ), or degree of exploitation of labor, is the ratio of surplus-value to the variable capital:

$$\sigma = \frac{s}{w} = \frac{i + e + r + p}{w}. \quad (4)$$

The rate of profits ( $\pi$ ) on the other hand, is the ratio of profit to the total capital invested *minus* rentable property; that is to say,

$$\pi = \frac{p}{C - R} = \frac{s - i - e - r}{C - R}. \quad (5)$$

It appears at a glance from the comparison of the formulæ (4) and (5), that the rate of profits and the rate of surplus-value are entirely different quantities and will vary differently. While surplus-value, other things being equal, will vary in direct ratio to the quantity of wage labor employed, the rate of profits, being dependent on other factors, may remain constant.

From equation (4)  $\sigma = \frac{s}{w}$ , we derive

$$\frac{s + w}{s} = \frac{\sigma + 1}{\sigma}. \quad (6)$$

In this formula  $s + w$  represents the actual value yearly produced. It is assumed by Ricardo and Marx that this value is measured by the quantity of labor employed in its production. Let the number of laborers be  $l$ , the value yearly produced per laborer,  $v$ ; then in the equation

$$\frac{s + w}{l} = v. \quad (7)$$

$v$ , according to Marx, will be constant. Equation (7) is thus the arithmetical expression of the Marx-Ricardian law of labor-value.

Substitute in equation (7)  $s + w$  from equation (6); we have then,

$$v = \left(1 + \frac{1}{\sigma}\right) \frac{s}{l}. \quad (8)$$

This equation contains all the essential elements of the problem of value; value being represented as a function of surplus value, of labor employed, and of the degree of exploitation of labor.

Let us first proceed with the analysis of the latter element.

II. Is  $\sigma$  a constant, or a variable quantity?

Dr. Conrad Schmidt, in his study of the present problem,<sup>1</sup> starts from the assumption that the degree of exploitation of the laborer is the same in all branches of industry. Obviously under the influence of a socialistic feeling which attaches odium to the category "exploitation of labor," he unwittingly glides into psychology—plainly a deviation from the method of Karl Marx.

In this assumption it is implied that the degree of exploitation is actually determined by the eagerness of the capitalist to derive the greatest benefit possible from his laborer; as the stimulus is equally strong with all the capitalists, consequently the results must also be very much the same. In fact, however, it is by other agencies than the good will or malice of the capitalist that the degree of exploitation of labor is determined.

Suppose for sake of argument that Dr. Schmidt's proposition is true. Then in the equation

$$\sigma = \frac{s}{w}. \quad (4)$$

from which our formula (8) is derived, surplus-value bears ever the same ratio to wages. If this were so, wages would invariably increase as labor gains in productivity, and at precisely the same rate. This desideratum of Rodbertus has not yet taken effect in capitalistic society.

<sup>1</sup> *Die Durchschrittsprofitrate auf Grundlage des Marx'schen Werthgesetzes.* By DR. CONRAD SCHMIDT. Stuttgart, 1889, p. 46.

The premises of Dr. Schmidt's analysis thus being shown to be wrong, the whole of his reasoning from those premises is irreparably vitiated.<sup>1</sup>

A variable rate of surplus-value is therefore the basis on which the law of labor-value is to be constructed.

III. The solution of our problem is now reduced to the investigation of the conditions of the consistency of equations (8) and (5) representing value and the rate of profits :

$$\left\{ \begin{array}{l} v = \left(1 + \frac{1}{\sigma}\right) \frac{s}{l} \\ \pi = \frac{s - i - e - r}{C - R} \end{array} \right\}.$$

Eliminating  $s$  we obtain :

$$v = \left(1 + \frac{1}{\sigma}\right) \frac{(C - R) \pi + i + e + r}{l}. \quad (9)$$

Substitute the value of  $C$  from equation (1); we then further obtain :

$$v = \left(1 + \frac{1}{\sigma}\right) \frac{(F + M + P + B) \pi + i + e + r}{l}. \quad (A)$$

We find here all the elements of our problem combined in equation (A): value, quantity of labor, degree of exploitation of labor, capital and rate of profits.

Let us now examine under what conditions, in the formula (A), both  $v$ , value of one man's labor, and  $\pi$ , rate of profits, remain constant, when  $l$ , the quantity of labor employed, varies, capital remaining the same.

As rent does not in any way depend upon the number of hands employed, we shall throughout this analysis admit rent to be constant.

Since the number of hands employed by one capital is less than that employed by another, then by the substitution of a lesser number for  $l$  the fraction representing value,  $v$ , would be

<sup>1</sup> We need not go out of our way to show that the idea of a constant degree of exploitation of labor has no ground in the theory of Karl Marx. Dr. Schmidt himself quotes Marx's words to the contrary. (*loc. cit.* p. 104.)

increased. As the latter, however, is constant by assumption, some other element must decrease.

The sum total,

$$F + M + P + B = C - R,$$

must not change, as the capitals are equal by assumption, and rents, and consequently the values of the rentable properties, are supposed to be equal. The rate of profits is also constant by assumption. Then,

1. The amount of interest,  $i$ , paid on cash capital may diminish so as to balance the decrease of the denominator by a corresponding decrease of the numerator.

What would cause the amount of interest to decrease? As the number of hands decreases so does also the amount paid in wages, for which a sufficient cash deposit must always be kept on hand. The aggregate value of the capital might not be affected by this decrease of the cash deposit, provided the original outlay for fixed capital ( $F$ ) were respectively larger, or the value of the product on hand ( $P$ ) greater, which would be the result of greater productivity of labor, enabling a smaller number of hands to turn larger quantities of raw materials into finished product.

2. A decrease of the money deposit, and consequently of the amount of interest, might also result from a decrease of  $M$  and  $P$  (raw materials in store and in process of manufacture, and manufactured product on hand); the aggregate capital might nevertheless remain the same, inasmuch as the decrease of the live assets (raw materials, product on hand and money deposit) could be made up by an increase of the fixed capital. We know that  $M$  is only a part of  $M'$ , the aggregate amount of raw material manufactured yearly, as also  $P$  is only a portion of  $Y$ , the aggregate yearly product; or, to put it in arithmetical terms,

$$\left\{ \begin{array}{l} P = \frac{Y}{n} \\ M = \frac{M'}{n'} \end{array} \right\}. \quad (10)$$

where  $n$  and  $n'$  represent the rapidity of rotation, as Marx calls it,<sup>1</sup> of the capital in merchandise (*Waarencapital*) ( $P$ ), and of the productive capital, part of which is represented by the raw material ( $M$ ). This increased rapidity would be the outcome of improved machinery, shortening the period of production, and along with it the time spent in circulation. Though the total quantity of raw material turned out ( $M'$ ) and of product manufactured within one year ( $Y$ ) remain the same, the portions thereof ever in circulation,  $\frac{Y}{n}$  and  $\frac{M'}{n'}$ , would decrease, and the consequence would be a decrease of the money deposit ( $B$ ), whose function it is to pay the bills for raw material and accounts for wages until money flows back from the sale of product previously put on the market.

What is said here of interest, applies also to selling expenses, commissions, etc. ( $e$ ), which constitute a deduction from gross profits or surplus-value. Increased rapidity of rotation and greater concentration of capital may reduce commissions and selling expenses sufficiently to make up for the fall of the gross profits, or surplus-value.

3. But the amount of interest allowed for the use of money capital, as well as commissions and selling expenses, cannot be said necessarily to decrease in consequence of the economy of labor. The decrease in the number of wage receivers ( $l$ ), saving one part of the cash deposit, may be made up by a corresponding increase of the quantity of raw material ( $M$ ) turned out in the same period, *i. e.*, by an increase in the productivity of labor. What would be economized on one item, wages, would have to be disbursed in another place for raw material, and thus neither  $B$  nor  $i$  would decrease in our formula.

Is such an emergency possible without affecting the aggregate value of the capital?

We know that

$$C - R = F + M + P + B.$$

If  $B$  remains the same and  $M$  increases,  $P$  may at the same

<sup>1</sup> *Capital*, vol. ii., chaps. i.-iv.

time decrease ; the value of the product on hand may decrease in consequence of the greater rapidity of the process of rotation of capital referred to before, or through the saving of labor.

This is clearly shown by our formulae (10), (2), (3) and (7):

$$\left\{ \begin{array}{l} P = \frac{Y}{n} \\ Y = f + M' + w + i + e + r + p \\ i + e + r + p = s \\ \frac{s + w}{l} = v \end{array} \right\}.$$

Whence,

$$P = \frac{f + M' + lv}{n}.$$

Though  $M'$  will increase,  $P$  can decrease through the increase of  $n$  or the decrease of  $l$ , or both.

Inasmuch, therefore, as all the elements of the numerator.

$$(F + M + P + B) \pi + i + e + r.$$

remain the same, the decrease of the denominator ( $l$ ) must be compensated by an equal decrease of the factor  $(1 + \frac{1}{\sigma})$  and for that reason  $\sigma$  must increase ; that is to say, to keep up the same rate of profits under the law of labor-value notwithstanding the decrease of the amount of labor employed, the degree of exploitation of labor must increase. In other words, the scale of wages must be reduced as appears from the formulæ (4) and (7):

$$\left\{ \begin{array}{l} \frac{s}{w} = \sigma \\ \frac{s + w}{l} = v \end{array} \right\},$$

which may be thrown into the form :

$$\left\{ \begin{array}{l} (\frac{s}{l}) + (\frac{w}{l}) = v \\ (\frac{s}{l}) : (\frac{w}{l}) = \sigma : 1 \end{array} \right\}.$$

As  $\sigma$  increases, so does also  $(\frac{s}{l})$ , while  $v$ , the total value pro-

duced per laborer, remaining the same  $\left(\frac{w}{l}\right)$ , the wage per laborer, must decrease.<sup>1</sup>

We thus come to the conclusion that as soon as the manufacturer employing expensive labor-saving machinery has to face a reduction from prices previously enhanced by monopoly to the normal value of his goods, he is compelled to retrench on the wages of his employees. That this is the method resorted to in reality has been evidenced to the satisfaction of every observer in the course of the latest conflicts between labor and capital in this country, as well as in Great Britain.<sup>2</sup> The very cause that creates the necessity of reducing wages, viz., economy of labor, hands over to the capitalist the power to effect the reduction. To some extent greater competition among laborers, which results from the introduction of labor-saving devices, forces them to accept the terms offered. On the other hand, the introduction of improved machinery enables the capitalist to substitute unskilled labor, female and child labor, for skilled labor, and thus to pay a cheaper price for a commodity of lower quality. The maintenance of the workman during apprenticeship is supposed to be paid for in wages of skilled labor; the maintenance of the family enters into wages of male labor; neither of these two elements is present in child labor. The value of unskilled or child labor-power accordingly represents a smaller quantity of materialized labor.

#### IV.

We are now able after the preceding analysis to formulate our final conclusions. It still remains a question open for discussion, whether as a matter of fact the postulate of Ricardo and Marx concerning value is correct or not; but, as to its apparent

<sup>1</sup> In Appendix I. numerical examples are given by way of illustration of the algebraical formulæ above.

<sup>2</sup> The *Quarterly Journal of Economics* for January, 1891 (p. 261), contains the following suggestive statement made by a manufacturer before the British Trades Union Commission, 1867-89: "The selling price is ascertained at first, and then the price is fixed; the wages are fixed by the price of iron, not the price of iron by the rate of wages." (*Report and Evidence*, Roden, 10736)."



inconsistency with the tendency of profits to equality, we think we have shown that that difficulty is not insurmountable.

(1) The tendency of profits to equality does not operate in the market by making net profits proportional to capital invested. It is as a rule the selling price of the capital invested that follows the variations of profits. The great leveler whose function it is to enforce this equality among capitalists is the Stock Exchange. A contraction of capital in one business and a corresponding expansion in another might in the course of a generation so react upon the prices of manufactured articles as to bring about an approximately uniform rate of profits, but such a process of waiting would be too slow a method of readjustment for a *perpetuum mobile* like our modern industrial community.

(2) In particular cases equality of profits is reached without an appreciation or depreciation of capital invested. Yet, even here net profit does not count in the price of the article as a proportional charge over and above the cost of production, but on the contrary, it is the cost of production that must be made to suit the price of the article. This is attained either in the process of circulation of capital, or in the process of production. First, though the gross profits or surplus-value increase and decrease in direct ratio to the quantity of labor employed, yet the deduction to be made for interest, commissions, etc., may so vary as to prevent a change in the amount and rate of net profits. Second, when no readjustment of the shares of surplus-value between the several claimants could possibly prevent a fall in the rate of net profits, the remedy is found in a reduction on the price of the most elastic element of the cost of production, the wages of labor.

The speculations in the Stock Exchange, the substitution of the unskilled in place of the skilled laborer, the employment of women and children,—this is the business world's solution of the apparent contradiction that puzzles the student of Economics.

ISAAC A. HOURWICH.

UNIVERSITY OF CHICAGO.